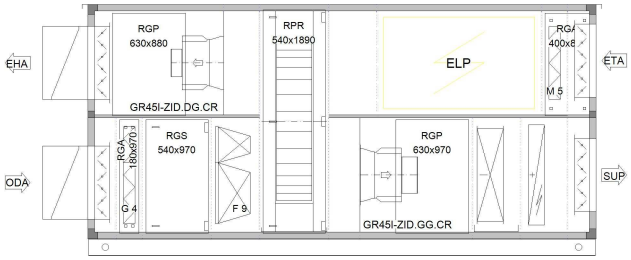
ROCCHEGGIANI®
care for air

Unit size	**CTA 15.10**
Supply air	**6.700 [m³/h]**
Return air	**5.900 [m³/h]**

Offer	**UTA 24001856**
Project date	**26/09/2024**
User	
Project	**DC 30MW IT - Milano**
Position	**1.0**
Description	**UTA Data Module**

airCalc++ Vers. P 5.0.1 (released on 9/26/2024)



Dimensional features

total length [mm]	Total width [mm]	total height [mm]	Net weight [kg]
4.250,0	**1.490,0**	**2030,0**	**~1.735,00**

Construction features (pay attention to possible local changes in the materials on single section)

Profiles	**F54TT - Aluminium Thermal Break**	*Monobloc unit: internal dividing panels 25 mm thick*			
Corners	**Nylon**				
Panel outside	**Galvanized prepainted RAL 9010**	Thickness	**0,50**	**[mm]**	
Panel inside	**Galvanized prepainted RAL 9010**	Thickness	**0,50**	**[mm]**	
Panel inside bottom	**Galvanized prepainted RAL 9010**	Thickness	**0,50**	**[mm]**	
Guides and int. frame	**Galvanized steel**				
Insulation	**Polyurethane foam 45 kg/m3**	Thickness	**54,0**	**[mm]**	
Roof	**Galvanized prepainted**				

Acoustic features

Frq.[Hz]	63	125	250	500	1000	2000	4000	8000	Sum [dB(A)]
Break out airborne sound power [dB]	**62,0**	**72,0**	**70,0**	**70,0**	**69,0**	**67,0**	**45,0**	**30,0**	**73,3**

Thermal and mechanical performance of casing

Certified mechanical performances due to EN 1886:2007

Mechanical stability	**D1(M)**
Casing leakage -400 Pa	**L1(M)**
Casing leakage +700 Pa	**L1(M)**
Panel reaction to fire class due to UNI 9177:	**1 (ONE)**
Filter by-pass leakage	**F9**

Certified mechanical performances due to EN 1886:2007

Thermal transmittance class	**T2**
Thermal bridge class	**TB2**

Performance declaration - Eurovent

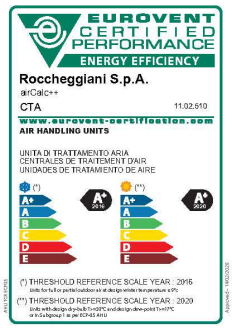
MB Range	**11.02.510**
MB Casing	**Pr05/Zn05-F54-TT-PU**
Type of unit	**External unit**

HRS Winter Thermal eff. (1:1)	(dry)	**76,80**	(EN 308)
HRS Summer Thermal eff. (1:1)		**76,7**	(EN 308)
HRS Summer Humidity eff. (1:1)		**70,10**	(EN 308)

EUROVENT CERTIFIED PERFORMANCE
AHU N° 11.02.510
Range: CTA
www.eurovent-certification.com

Energy performance declaration

Specific fan power [W/(m3/s)]	**1.858 [SFP4]**
Used lowest temp. [°C]	**-10,1**
Recirculation [%]	
Air velocity [m/s]	**1,41**
air density [kg/m³]	**1,20**
A.s.l.m. [m]	**0**
Reference city	**Milan**
Factor Fs-Pref (wint. cond.)	**0,93**
Factor Fs-Pref (summ. cond.)	**0,75**



Energy label class designed for wet condition

Dichiarazione di prestazione Ecodesign 1253-2014

Calculation valid	**Yes**	thermal efficiency	**76,80**
ErP Ready 2016	**Yes**	directional unit type	**BVU - NRVU**
ErP Ready 2018	**Yes**	Motor and drive type	**variable speed**
Specific fan power internal	**697**	external leakage rate at +400 Pa	**0,04**
effective electric power input	**3,830**	external leakage rate at -400 Pa	**0,03**
type of heat recovery system	**other HRS**	internal leakage rate at 200 Pa	**1,50**

ErP 2018 COMPLIANT

Supply air

Unit definition

Unit size	**CTA 15.10**	**F54TT**			
Airflow [m³/h]	**6.700**	Air velocity [m/s]	**1,41**	Length [mm]	**4.250,0**
Ext. pressure [Pa]	**350**	Class DIN EN 13053	**V1**	Width [mm]	**1.490,0**
Tot. pressure [Pa]	**925**			Height [mm]	**1.040,0**
				Net weight [kg]	**~1.735,0**

Empty section	Supply air	**235,0 mm**	**0,59 m2**	**48 Pa**

Damper: Dimensions [mm] **900,0 x 610,0 x 125,0**

Width [mm]	**900,0**	Airflow [m³/h]	**6.700**	Material	**Aluminium**
Height [mm]	**610,0**	Air velocity [m/s]	**3,39**	Actuated by	**Ready for actuator**
Depth [mm]	**125,0**	Pressure drop [Pa]	**9**		

Intake / Outlet hood Dimensions [mm] **900,0 x 610,0 x 380,0**

Width [mm]	**900,0**	Airflow [m³/h]	**6.700**	Material	**Peraluman**
Height [mm]	**610,0**	Air velocity [m/s]	**3,39**		
Depth [mm]	**380,0**	Pressure drop [Pa]	**39**		

Damper actuator **GMA126.1E**

Quantity	**1**	Mode	**on/off**	Voltage [V]	**24**
Supplier	**Siemens**	torque [Nm]	**7,000**	Current [A]	**0,21**
				Protection	**IP54**

Filter	Supply air	**220,0 mm**	**0,59 m2**	**63 Pa**

Manufacture	**Roccheggiani**	Filter length [mm]	**98,0**
Type	**V-PF-G4-98**	Filter surface [m2]	**2,20**
Class (EN 779:2012)	**G4**	Cells pcs x size	**2** x **V-PF-G4-98** **492,0** x **592,0**
Class (ISO 16890)	**Coarse 55%**		**2** x **V-PF-G4-98** **290,0** x **592,0**
Clean dP [Pa]	**38**		
Dirty dP [Pa]	**88**		
Applied dP [Pa]	**63**		
Airflow [m³/h]	**6.700** **2,01 m/s**		
Filter handling	**from side - pullout**		

Revision panel with turn bolt (Central handle) Dimensions [mm] **180,0 x 970,0**

1 Pcs **DPE2500 for airflow measurement** **-**

Empty section	Supply air	**580,0 mm**	**1,78 m2**	**Pa**

Door with hinge and single lever Dimensions [mm] **540,0 x 970,0**

1 Pcs **FTK+ 270 VVS NTC10K Temperature and humidity probe (0-10V)**

Position **UTA Data Module**

Filter

Supply air	400,0 mm	1,19 m2	129 Pa

Manufacture	**Roccheggiani**	Filter length [mm]	**292,0**
Type	**V-BF-F9-292**	Filter surface [m2]	**48,00**
Class (EN 779:2012)	**F9**	Cells pcs x size	**2** x **V-BF-F9-292** **492,0** x **592,0**
Class (ISO 16890)	**ePM1 85%**		**2** x **V-BF-F9-292** **290,0** x **592,0**
Clean dP [Pa]	**79**		
Dirty dP [Pa]	**179**		
Applied dP [Pa]	**129**		
Airflow [m³/h]	**6.700** **2,01 m/s**		
Filter handling	**Dirty air widthdrawal**		
Material frame	**Galvanized steel**	Filter energy class	**B**

1 Pcs **DPE2500 for airflow measurement** -

Heat wheel in casing

Supply air	580,0 mm	3,49 m2	183 Pa

EM1370x1370-1320V-018-2D0OO-6BP0-A

Heating mode				Cooling mode			
Supply [m³/h]	**6.700**			Supply [m³/h]	**6.700**		
Entering [°C]	**-10,10**	Humidity [%]	**76,0**	Entering [°C]	**37,90**	Humidity [%]	**50,0**
Leaving [°C]	**15,20**	Humidity [%]	**75,3**	Leaving [°C]	**29,50**	Humidity [%]	**54,5**
Pressure drop [Pa]			**183**	Pressure drop [Pa]			**183**
Standard pressure drop (1.2 kg/m3) [Pa]			**192**	Standard pressure drop (1.2 kg/m3) [Pa]			**158**
Exhaust [m³/h]	**5.900**			Exhaust [m³/h]	**5.900**		
Entering [°C]	**27,00**	Humidity [%]	**50,0**	Entering [°C]	**27,00**	Humidity [%]	**50,0**
Leaving [°C]	**-6,10**	Humidity [%]	**100,0**	Leaving [°C]	**36,10**	Humidity [%]	**49,0**
Pressure drop [Pa]			**149**	Pressure drop [Pa]			**168**
Standard pressure drop (1.2 kg/m3) [Pa]			**147**	Standard pressure drop (1.2 kg/m3) [Pa]			**146**
Tot. recovery capacity [kW]	**106,42**			Tot. recovery capacity [kW]	**54,29**		
Sens. recovery capacity [kW]	**63,47**			Sens. recovery capacity [kW]	**17,54**		

thermal efficiency [%]	**68,1**	(EN 308)	thermal efficiency [%]	**77,4**	(EN 308)
Humidity efficiency [%]	**68,8**		Humidity efficiency [%]	**70**	
Energy efficiency class [%]	**H1**	(EN 13053)	OATR [%]	**1,08**	
Energy efficiency [%]	**73,70**	(EN 13053)	OACF	**1,01**	

control type **Constant 180** **Constant drive 3x380-420V**

Nominal data

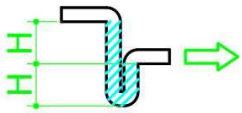
Nominal power [kW] **0,180** nominal current [A] **0,70** nominal voltage [V] **3x400**

Pressure Door Dimensions [mm] **540,0 x 1.890,0**

Drain pan (35) Material **AISI 304** Drain connection **1 1/4"**

Water trap selection

Minimum height H [mm] **92**



Empty section

Supply air	260,0 mm	0,72 m2	Pa

Offer	**UTA 24001856**	Position	**1.0**	**airCalc Vers.**	**P 5.0.1 (released on 9/26/2024)**
Project	**DC 30MW IT - Milano**				**26/09/2024**
Position	**UTA Data Module**				

Plug fan	Supply air	**940,0 mm**	**2,96 m2**	**Pa**

Fan	**GR45I-ZID.GG.CR**	Motor	**ECblue-IE5-50-152-0-5**	**IE5**
Air volume [m³/h]	**6.700**	Protection	**IP55**	
External static [Pa]	**350**	Insulation class	**F**	
dynamic pressure [Pa]	**23**	Voltage	**3x400 V / 50 Hz**	
Total static pressure [Pa]	**902**	Power [kW]	**5,000**	
Total pressure [Pa]	**925**			
Speed [1/min]	**2.046**	Speed [1/min]	**2.620**	
efficiency %	**70,6**	System absorbed power [kW]	**2,440**	
		nominal current [A]	**7,60**	
Supplier	**Ziehl-Abegg**			
Code	**ZAB-116903/A01-3/400/50**	*The system effect is considered in the performance of the fan*		

K-factor [m³/h] **284** [ρ = 1,2 kg/m³] ($Q = k\sqrt{\Delta p}$)

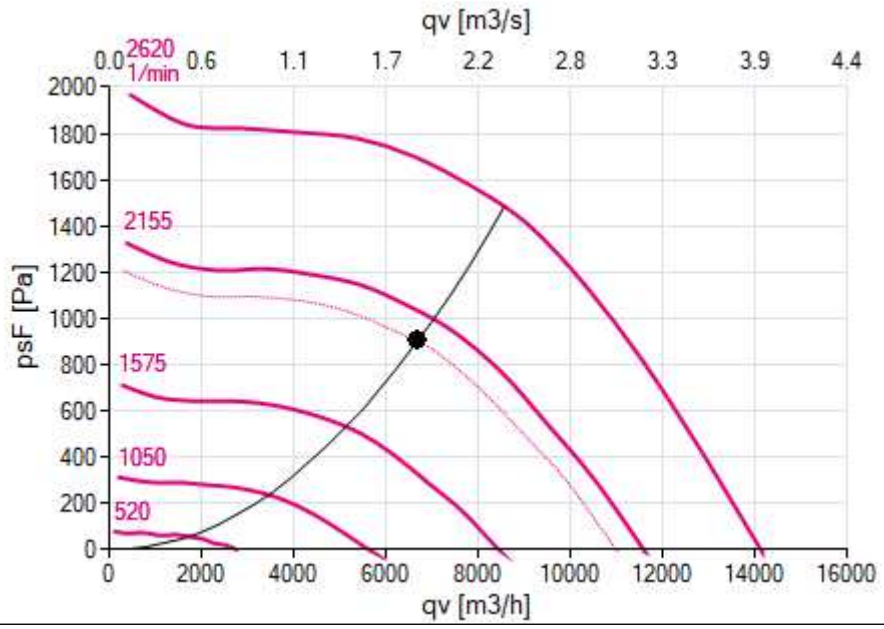
K-factor [adim] **220** ($Q = k\sqrt{\Delta p \frac{2}{\rho}}$)

Fan octave band sound power level (Lokt) [dB]

Frq.[Hz]	63	125	250	500	1000	2000	4000	8000
Inlet	**71,0**	**78,0**	**77,0**	**74,0**	**69,0**	**67,0**	**63,0**	**62,0**
Outlet	**75,0**	**85,0**	**81,0**	**81,0**	**79,0**	**80,0**	**76,0**	**71,0**

Control Signal (0-10V) **7,80**

Specific fan power [W/(m3/s)] **1.187** **SFP2**



1 Pcs	**DPE2500 Flow LCD for airflow measurement**	**-**	
1 set	**Tube for airflow measurement**	**-**	
Removable panel		Dimensions [mm]	**630,0 x 970,0**
Opening	**L**	Dimensions [mm]	**445,0 x 445,0**

Cooling coil	Supply air	**400,0 mm**	**1,19 m2**	**72 Pa**

Evaporating coil

Airflow [m³/h]	**6.700**			Medium type	**R410A**
Air velocity [m/s]	**2,21**			Evaporating temp. [°C]	**10,00**
Air in [°C]		Humidity [%]		Overheating [°C]	**5,00**
Air out [°C]	**15,00**	Humidity [%]	**93,0**	SHR	**0,57**
Tot. capacity [kW]	**57,01**			Connection in [mm]	
Air press. Drop [Pa]	**72/58**	(wet/dry)		Connection out [mm]	

Heating mode

Air in [°C]		Condensing temp. [°C]	**45,00**
Air out [°C]	**27,00**	hot gas temp. in [°C]	**60,00**
Tot. capacity [kW]	**26,48**	hot gas temp. out [°C]	**38,00**

25 x 21.65 3/8 - CR 31NT 5NR 1085A 2.1P 25NC

Rows	**5**
nos. of refr.circuits	**1 circuit**
Circuits	**25**
Fin space [mm]	**2,10**

Materials:

Fins	**Aluminium**
Pipes	**Copper**
Header	**steel painted**
Frames	**Galvanized steel**
Fin protection	**-**

1 Pcs **U-20ME2E8 (VRF Eco-i Eco-eXtreme outdoor unit)** **-**
Highly energy efficient Eco-i Eco-eXtreme series variable refrigerant flow (VRF) heat pump outdoor unit, equipped with DC Inverter regulation, with the following main technical characteristics:
- COP = 3.94
- EER = 3.35
- Inverter bi-compressor system
- Very low standard sound level: 60 dB(A)
- Muted mode
- Winter operation up to -25°C.
- Summer operation up to +52°C
- VET system for managing the delivery temperature of the internal unit
- Demand control function for limiting peak consumption as standard
- Nominal cooling capacity: 56.0 (75,6) kW
- Nominal thermal capacity: 63.0 kW
- 380 Volt electrical power supply.
PAW-560MAH3: Advanced series AHU kit for VRF
Advanced type direct expansion AHU management kit for batteries with a nominal capacity of up to 56 kW. The kit, suitable for combination with VRF variable refrigerant flow systems, is composed of an LEV electronic expansion valve, thermistors, IP 65 plastic box containing the control part and no. 1 electronic control with LCD display model CZ-RTC4. The control logic includes the cold draft prevention function, the modulation of the set point according to the external temperature, and the possibility of external demand control management via 0-10V signal

Drain pan (55) Material **AISI 304** Drain connection **1 1/4"**

Water trap selection

Minimum height H [mm] **92**

1 Pcs **Technical cabinet TC** Dimensions [m] **1.035 x 2.098 x .63**

panel thickness	**25 mm**	Profiles	**Aluminium**
Panel inside	**Galvanized prepainted**	Insulation	**Polyurethane foam**
Panel outside	**Galvanized prepainted**	With support pins	**Yes**
Panel inside bottom	**No**	With baseframe	**No**

1 Pcs **AKF10+ NTC10k Temperature probe (-50/150°C)** **-**

Position UTA Data Module

Electric heater

Supply air | 400,0 mm | 1,19 m2 | Pa

Air in [°C]	15,00	Heat capacity [kW]	26,92
Air out [°C]	27,00	Power supply	3Ph./400V/50Hz
Air volume [m³/h]	6.700	Steps	3
Elements material	AISI 304		
Frame material	Galvanized steel		
Execution	IP44		

St.	1.	2.	3.	4.	5.	6.	7.	8.	9.
kW	3,85	7,70	15,40						

1	Pcs	Safety thermostat aut.	-
1	Pcs	el Heater frame 1.5mm	-
1	Pcs	Technical cabinet connected to previous TC	-
1	Pcs	AKF10+ NTC10k Temperature probe (-50/150°C)	-

Empty section

Supply air | 235,0 mm | 1,37 m2 | 11 Pa

Damper: Dimensions [mm] 851,5 x 610,0 x 125,0

Width [mm]	851,5	Airflow [m³/h]	6.700	Material	Aluminium
Height [mm]	610,0	Air velocity [m/s]	3,58	Actuated by	Ready for actuator
Depth [mm]	125,0	Pressure drop [Pa]	11		

Damper actuator GMA126.1E

Quantity	1	Mode	on/off	Voltage [V]	24
Supplier	Siemens	torque [Nm]	7,000	Current [A]	0,21
				Protection	IP54

1	Pcs	Technical cabinet connected to previous TC	-

Noise calculation

Sound power level [dB]

Frq.[Hz]	63	125	250	500	1000	2000	4000	8000	Sum [dB(A)]
Inlet	69,0	72,0	69,0	62,0	53,0	50,0	42,0	40,0	64,2
Outlet	75,0	81,0	77,0	77,0	76,0	76,0	72,0	67,0	81,8
Casing	62,0	72,0	70,0	70,0	69,0	67,0	45,0	30,0	73,3

sound pressure level [dB]

Frq.[Hz]	63	125	250	500	1000	2000	4000	8000	Sum [dB(A)]
Inlet	61,1	64,1	61,1	54,1	45,1	42,1	34,1	32,1	56,3
Outlet	67,1	73,1	69,1	69,1	68,1	68,1	64,1	59,1	73,9
Casing	54,1	64,1	62,1	62,1	61,1	59,1	37,1	22,1	65,4

measuring point at 1 m of distance

The calculated sound pressure values remain valid only in the case of free and hemispherical radiation from the noise source.
Other sources of noise, the acoustics of the room, other sources of vibration and the installed air ducts can influence these values, so the values possibly measured in the installation site may differ from those indicated.

Exhaust air

Unit definition

Unit size CTA 15.9 F54TT

Airflow [m³/h]	5.900	Air velocity [m/s]	1,37	Length [mm]	4.250,0
Ext. pressure [Pa]	250	Class DIN EN 13053	V1	Width [mm]	1.490,0
Tot. pressure [Pa]	600			Height [mm]	950,0
				Net weight [kg]	~

Position **UTA Data Module**

Empty section	Exhaust air	**235,0 mm**	**0,81 m2**	**7 Pa**

Damper: Dimensions [mm] **900,0 x 610,0 x 125,0**

Width [mm]	**900,0**	Airflow [m³/h]	**5.900**	Material	**Aluminium**
Height [mm]	**610,0**	Air velocity [m/s]	**2,99**	Actuated by	**Ready for actuator**
Depth [mm]	**125,0**	Pressure drop [Pa]	**7**		

Damper actuator **GMA126.1E**

Quantity	**1**	Mode	**on/off**	Voltage [V]	**24**
Supplier	**Siemens**	torque [Nm]	**7,000**	Current [A]	**0,21**
				Protection	**IP54**

Filter	Exhaust air	**220,0 mm**	**0,81 m2**	**84 Pa**

Manufacture	**Roccheggiani**
Type	**V-PF-M5-98**
Class (EN 779:2012)	**M5**
Class (ISO 16890)	**ePM10 50%**
Clean dP [Pa]	**42**
Dirty dP [Pa]	**126**
Applied dP [Pa]	**84**
Airflow [m³/h]	**5.900** **2,17 m/s**
Filter handling	**from side - pullout**

*** Filter handling is not integrated in the Eurovent certified software range**

Filter length [mm]	**98,0**		
Filter surface [m2]	**1,53**		
Cells pcs x size	**2** x	**V-PF-M5-98**	**492,0** x **592,0**
	1 x	**V-PF-M5-98**	**290,0** x **592,0**

Revision panel with turn bolt (Central handle) Dimensions [mm] **400,0 x 880,0**

1 Pcs **FTK+ 270 VVS NTC10K Temperature and humidity prøbe (0-10V)**

1 Pcs **DPE2500 for airflow measurement** **-**

Empty section	Exhaust air	**1.380,0 mm**	**6,02 m2**	**Pa**

Electric panel **Mounted on board**

Empty section	Exhaust air	**400,0 mm**	**1,62 m2**	**Pa**

Heat wheel in casing	Exhaust air	**580,0 mm**	**3,49 m2**	**168 [Pa]**

Empty section	Exhaust air	**300,0 mm**	**1,17 m2**	**Pa**

Offer	**UTA 24001856**	Position	**1.0**	**airCalc Vers.**	**P 5.0.1 (released on 9/26/2024)**
Project	**DC 30MW IT - Milano**				**26/09/2024**
Position	**UTA Data Module**				

Plug fan	Exhaust air	**1.135,0 mm**	**5,5 m2**	**38 Pa**

Fan	**GR45I-ZID.DG.CR**	Motor	**ECblue-IE5-50-116-0-2.4**	**IE5**
Air volume [m³/h]	**5.900**	Protection	**IP55**	
External static [Pa]	**250**	Insulation class	**F**	
dynamic pressure [Pa]	**18**	Voltage	**3x400 V / 50 Hz**	
Total static pressure [Pa]	**582**	Power [kW]	**2,400**	
Total pressure [Pa]	**600**			
Speed [1/min]	**1.691**	Speed [1/min]	**2.050**	
efficiency %	**70,8**	System absorbed power [kW]	**1,390**	
		nominal current [A]	**3,70**	
Supplier	**Ziehl-Abegg**			
Code	**ZAB-116901/A01-3/400/50**	*The system effect is considered in the performance of the fan*		

K-factor [m³/h] **284** [ρ = 1,2 kg/m³] $(Q = k \sqrt{\Delta p})$

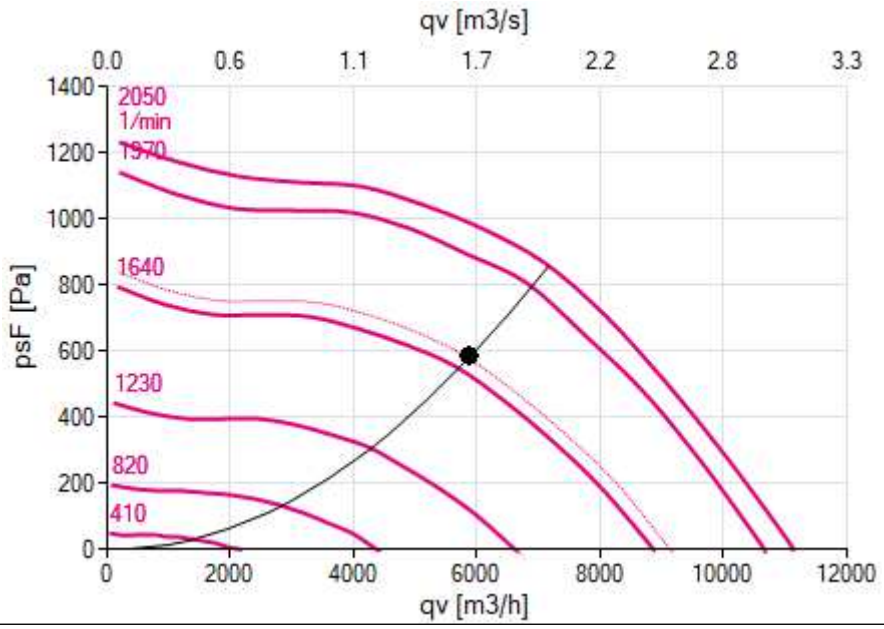
K-factor [adim] **220** $(Q = k \sqrt{\Delta p \frac{2}{\rho}})$

Fan octave band sound power level (Lokt) [dB]

Frq.[Hz]	63	125	250	500	1000	2000	4000	8000
Inlet	**66,0**	**74,0**	**72,0**	**69,0**	**63,0**	**61,0**	**58,0**	**55,0**
Outlet	**70,0**	**82,0**	**74,0**	**75,0**	**72,0**	**68,0**	**64,0**	**60,0**

Control Signal (0-10V) **8,20**

Specific fan power [W/(m3/s)] **762** **SFP1**



1	Pcs	**DPE2500 Flow LCD for airflow measurement**	**-**
1	set	**Tube for airflow measurement**	**-**

Removable panel — Dimensions [mm] **630,0 x 880,0**

Damper: — Dimensions [mm] **851,5 x 610,0 x 125,0**

Width [mm]	**851,5**	Airflow [m³/h]	**5.900**	Material	**Aluminium**
Height [mm]	**610,0**	Air velocity [m/s]	**3,16**	Actuated by	**Ready for actuator**
Depth [mm]	**125,0**	Pressure drop [Pa]	**8**		

Intake / Outlet hood — Dimensions [mm] **900,0 x 610,0 x 380,0**

Width [mm]	**900,0**	Airflow [m³/h]	**5.900**	Material	**Peraluman**
Height [mm]	**610,0**	Air velocity [m/s]	**2,99**		
Depth [mm]	**380,0**	Pressure drop [Pa]	**30**		

Position **UTA Data Module**

Damper actuator	**GMA126.1E**				
Quantity	**1**	Mode	**on/off**	Voltage [V]	**24**
Supplier	**Siemens**	torque [Nm]	**7,000**	Current [A]	**0,21**
				Protection	**IP54**

Opening **L** Dimensions [mm] **445,0 x 445,0**

Noise calculation

Sound power level [dB]

Frq.[Hz]	63	125	250	500	1000	2000	4000	8000	Sum [dB(A)]
Inlet	**64,0**	**71,0**	**68,0**	**64,0**	**57,0**	**54,0**	**50,0**	**46,0**	**65,3**
Outlet	**70,0**	**82,0**	**74,0**	**75,0**	**72,0**	**68,0**	**64,0**	**60,0**	**77,0**
Casing	**57,0**	**69,0**	**63,0**	**64,0**	**62,0**	**55,0**	**33,0**	**19,0**	**65,7**

sound pressure level [dB]

Frq.[Hz]	63	125	250	500	1000	2000	4000	8000	Sum [dB(A)]
Inlet	**56,1**	**63,1**	**60,1**	**56,1**	**49,1**	**46,1**	**42,1**	**38,1**	**57,4**
Outlet	**62,1**	**74,1**	**66,1**	**67,1**	**64,1**	**60,1**	**56,1**	**52,1**	**69,1**
Casing	**49,1**	**61,1**	**55,1**	**56,1**	**54,1**	**47,1**	**25,1**	**11,1**	**57,8**

measuring point at **1 m** of distance

The calculated sound pressure values remain valid only in the case of free and hemispherical radiation from the noise source.
Other sources of noise, the acoustics of the room, other sources of vibration and the installed air ducts can influence these values, so the values possibly measured in the installation site may differ from those indicated.

Baseframe	**BF140**	Material	**Galvanized steel**	Thickness [mm]	**2,0**
Lifting holes [mm]	**56,0**	Height [mm]	**140,0**	Welded	**No**

1 set	**Roof**	**Galvanized prepainted**
1 set	**Unit with regulation**	**-**

Delivery sections

no.	Width	Height	Length	Net weight
1	**1.490,0**	**1.960,0**	**4.250,0**	**1.735,00**

Eurovent EEC Data

	WINTER		SUMMER	
	Supply	Return	Supply	Return
Airflow [m³/h]	**6.700**	**5.900**	**6.700**	**5.900**
Total static pressure = internal (without fan sys. effect) + external [Pa]	**856**	**547**	**856**	**547**
Internal static pressure = total static - external [Pa]	**506**	**297**	**506**	**297**
Real power input [kW]	**2,440**	**1,390**	**2,440**	**1,390**
Size reference velocity [m/s]	**1,410**	**1,370**	**1,410**	**1,370**
Temperature efficiency, HRS mass flow balanced [%]	**76,80**	**76,80**	**76,7**	**76,7**
Humidity efficiency, HRS mass flow balanced [%]	**-**	**-**	**70,10**	**70,10**
Pressure drop HRS standard density [Pa]	**192**	**147**	**158**	**146**
Pressure drop HRS standard density (bypass on) [Pa]	**-**	**-**	**158**	**146**
Mixing ratio [%]	**0**		**0**	
Electric re-heater	**Yes**		**Yes**	
Design dry-bulb temperature [°C]	**-**		**33,20**	
Design dew-point temperature [°C]	**-**		**19,70**	
Winter design outdoor temperature [°C]	**-3,20**		**-3,20**	
Factor Fs-Pref	**0,93**		**0,75**	

Roccheggiani S.p.A.

Via I° Maggio, 10
IT 60021 Camerano (AN)
Tel.: 071 / 730023
Fax: 071 / 7304005

Offer	**UTA 24001856**
From date	**26/09/2024**
Project	**DC 30MW IT - Milano**
Position	**1.0**
LV-Position	
Quantity	**1**
Print data	**26/09/2024**
User	

www.roccheggiani.it
ahu@roccheggiani.it

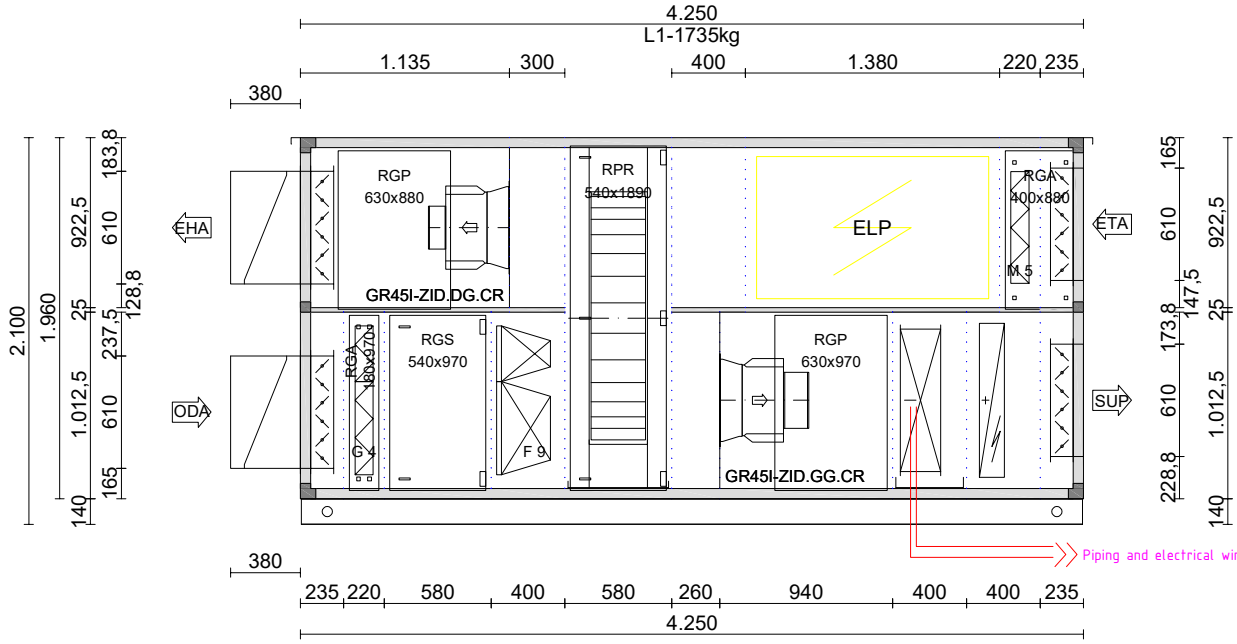
Regulation list

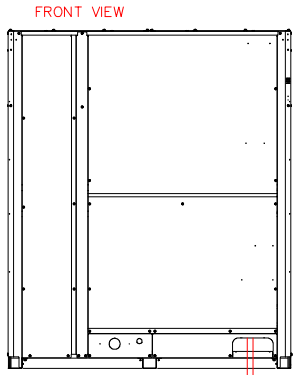
	Electric panel
n. 1	Power and regulation electrical panel. Power supply 400V/3F+N/50Hz
	Start and stop signal. Indication of dirty filters. Motor save protection.
	PCOWEB SE, Ethernet card for IP protocols
	Performance of logical engineering of regulation and drafting of wiring diagrams
	AHU Calibration and functional factory testing included
	Control type External/ambient air
	Temperature and humidity control
	Control type Supply air
	Temperature and humidity control
	Air flow control
	Saturation temperature probe
	Control type Return air
	Temperature and humidity control
	Air flow control
	Additional options
	Coil valves and actuators included
	Hydraulic assemblies and accessories included
	Start-up on site
	Included, by specialized technicians

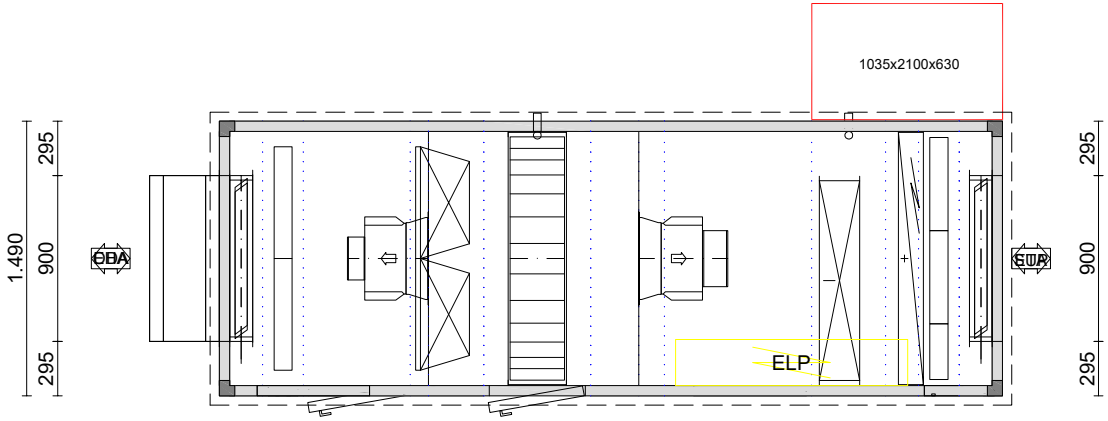
Offer	**UTA 24001856**		airCalc Vers. P 5.0.1
Project	**DC 30MW IT - Milano**		
Position	**1.0**		
Description	**UTA Data Module**	From date	**26/09/2024**

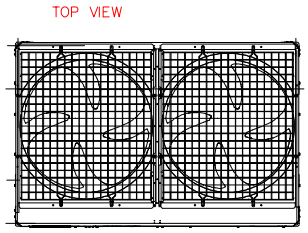
List of material mounted on board			
Pos.	**QTA**	**Code**	**Description**
1	1	**COM_CTD**	Power and regulation electrical panel. Power supply 400V/3F+N/50Hz. Start and stop signal. Dirty filters indication.
2	1	**C.PCO**	C.PCO Controller
3	1	**C.PCO-CON**	Removable connector kit for C.PCO
4	1	**SKIT1000.0001**	PGN1000F01 + PGN100FRM1 Display for panel mounting, connectable to the pCO by means of a cable with telephone connector
5	1	**PCO1000WD0**	PCOWEB SE, ETHERNET CARD FOR IP PROTOCOLS
6	1	**AKF10+ NTC10k Carel 250.06**	Temperature probe (-50/150°C)
7	1	**AKF10+ NTC10k Carel 250.06**	Temperature probe (-50/150°C)
8	1	**FTK + 270 VVS NTC10k**	Temperature and humidity probe (0-10V)
9	1	**FTK + 270 VVS NTC10k**	Temperature and humidity probe (0-10V)
10	1	**DPE2500**	Controller for differential pressure/airflow, 0-2500 Pa
11	1	**DPE2500**	Controller for differential pressure/airflow, 0-2500 Pa
12	1	**DPE2500**	Controller for differential pressure/airflow, 0-2500 Pa
13	1	**GMA126.1E**	Damper actuator, on-off, with spring return
14	1	**GMA126.1E**	Damper actuator, on-off, with spring return
15	1	**GMA126.1E**	Damper actuator, on-off, with spring return
16	1	**GMA126.1E**	Damper actuator, on-off, with spring return
17	1	**DPE2500 Flow**	Controller for differential pressure/airflow, 0-2500 Pa, with display
18	1	**DPE2500 Flow**	Controller for differential pressure/airflow, 0-2500 Pa, with display

airCalc++ P 5.0.1 / D 11.2.0









Preliminary drawing

SUPPLY	CTA 15.10		F54TT
Airflow	m^3/h		6.700
Ext. pressure	Pa		350
Tot. pressure	Pa		925
Motorpower	kW	1x	5,000
Power supply			400V/3/50Hz
E-heating	kW		26,92
DX-cooling	kW		57,01
Energy rec	kW		106,42 / 54,29

EXHAUST	CTA 15.9		F54TT
Airflow	m^3/h		5.900
Ext. pressure	Pa		250
Tot. pressure	Pa		600
Motorpower	kW	1x	2,400
Power supply			400V/3/50Hz
Energy rec	kW		106,42 / 54,29

CLIENTE-CUSTOMER:	DBA PRO. S.p.A.	REV. 0 DATA-DATE:	User:
CANTIERE-CONSTRUCTION.:	DC 30MW IT - Milano	POS.-ID: 1.0	
RIFERIMENTO-REF.:	UTA Data Module		
OGGETTO-OBJECT:	CTA 15.10	TIPO-TYPE:	PROJECT-ID.: UTA 24001856
ROCCHEGGIANI. care for air — ROCCHEGGIANI S.p.A?Via 1° maggio, 60021 Camerano (AN)Italy		- .SHEET: - / -	
		scale: xx.xx TOLL.: UNI.EN22768-V	DISEGNO-DRAW.:

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